

## REMARKS

In response to the Final Office Action dated June 14, 2011, , and in response to the Request for Continued Examination filed herewith, claims 1, 2, 12, 22-24, 26 and 28 have been canceled and new claims 29-32 have been amended. Claims 3-11, 13-21, 25, 27 and 29-32 are pending in the application.

In paragraph 3 on page 3 of the Final Office Action, Claims 1 -4, 7-16, 25, 27, 28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Safadi in view of Ellis.

In paragraph 4 on page 17 of the Final Office Action, Claims 5, 6, 17-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Safadi and Ellis, and further in view of Moeller.

In paragraph 5 on page 20 of the Final Office Action, Claims 22-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Safadi, Ellis and Moeller, and in further view of Youden.

Applicant respectfully traverses the rejection, but in the interest of expediting prosecution has amended the claims. .

Independent claim 29 sets forth presenting a program guide identifying titles of audiovisual data and identifying a set start time and a provided stop time for each of the identified titled audiovisual data presented in the program guide, receiving a request for recording one of the identified titled audiovisual data selected from the program guide prior to the set start time associated with the one of the identified titled audiovisual data selected from the program guide, determining from metadata whether the selected one of the identified titled audiovisual data has a known duration defined by the set start time and provided stop time or has an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box, when the selected one of the identified titled audiovisual data is determined from the metadata to have a known duration, allocating sufficient memory to record the selected one of the identified titled audiovisual data having a known duration, when the selected one of the identified titled audiovisual data is determined from the metadata to have an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box receiving, at the set-top box, the selected one of the identified

titled audiovisual data presented in the program guide as tracks divided into sequential extents representing sections of the selected one of the identified titled audiovisual data, allocating a portion of storage space for recording a received extent of the selected one of the identified titled audiovisual data, determining whether the received extent is a last extent of the selected one of the identified titled audiovisual data, when the received extent is determined not to be the last extent, determining whether a predetermined part of the allocated memory is consumed by recording the received extent of the selected one of the identified titled audiovisual data, when a predetermined part of the allocated memory is determined to be consumed, allocating a next portion of memory, when the received extent is determined to be the last extent, terminating the recording of the selected one of the identified titled audiovisual data after the last extent is recorded and deallocating any of the allocated memory remaining after terminating the recording of the selected one of the identified titled audiovisual data. Independent claims 30-32 set forth similar elements.

In contrast, Safadi discloses a personal versatile recorder that registers with an electronic programming guide server so that the personal versatile recorder is notified by the electronic programming guide server when a selected event being recorded has ended. Safadi further discloses caching programs for playback, wherein minutes of data may be prefetched and cached in response to a playback request. Thus, this data is cached prior to broadcast to the user.

Accordingly, Safadi fails to disclose, teach or suggest determining from metadata whether a selected audiovisual data has an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box. Safadi does not disclose the recording of content having an unknown duration identified in metadata of the content.

Safadi further fails to disclose, teach or suggest that when the selected one of the identified titled audiovisual data is determined from the metadata to have an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box, receiving, at the set-top box, the selected one of the identified titled audiovisual data presented in the program guide as tracks divided into sequential extents representing sections of the selected one of the identified titled audiovisual data, allocating a portion of storage space

for recording a received extent of the selected one of the identified titled audiovisual data, determining whether the received extent is a last extent of the selected one of the identified titled audiovisual data, when the received extent is determined not to be the last extent, determining whether a predetermined part of the allocated memory is consumed by recording the received extent of the selected one of the identified titled audiovisual data, when a predetermined part of the allocated memory is determined to be consumed, allocating a next portion of memory and when the received extent is determined to be the last extent, terminating the recording of the selected one of the identified titled audiovisual data after the last extent is recorded. Safadi does not mention any process for iteratively allocating memory when the duration of content is unknown. Safadi does not mention any process for iteratively allocating memory until the end of content having an unknown duration has been fully recorded. Rather, Safadi relies upon an electronic programming guide server to provide an indication when a selected event being recorded has ended.

Safadi further fails to disclose, teach or suggest deallocating any of the allocated memory remaining after terminating the recording of the selected one of the identified titled audiovisual data. Safadi does not over-allocate memory because Safadi does not deal with recording programs of an unknown duration. Therefore, Safadi does not mention deallocating memory remaining after terminating the recording of the selected content.

Thus, Safadi fails to disclose, teach or suggest the invention as defined in new independent claims 29-32.

Ellis fails to remedy the deficiencies of Safadi. Ellis is merely cited as disclosing that the content is received and stored by a server and provided over a transport network to subscribers, where only the received plurality of content presently requested by any subscriber is forwarded to the transport network. Ellis et al. further discloses that a user may be able to cache programs in real-time so that a user may indicate a desire to record a program and press a "PAUSE key on remote control 40 to cache a live program.

However, Ellis fails to disclose, teach or suggest determining from metadata whether a selected audiovisual data has an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box. Ellis does not disclose the recording of content having an unknown duration identified in metadata of the content.

Ellis further fails to disclose, teach or suggest that when the selected one of the identified titled audiovisual data is determined from the metadata to have an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box, receiving, at the set-top box, the selected one of the identified titled audiovisual data presented in the program guide as tracks divided into sequential extents representing sections of the selected one of the identified titled audiovisual data, allocating a portion of storage space for recording a received extent of the selected one of the identified titled audiovisual data, determining whether the received extent is a last extent of the selected one of the identified titled audiovisual data, when the received extent is determined not to be the last extent, determining whether a predetermined part of the allocated memory is consumed by recording the received extent of the selected one of the identified titled audiovisual data, when a predetermined part of the allocated memory is determined to be consumed, allocating a next portion of memory and when the received extent is determined to be the last extent, terminating the recording of the selected one of the identified titled audiovisual data after the last extent is recorded. Ellis does not mention any process for iteratively allocating memory when the duration of content is unknown. Ellis does not mention any process for iteratively allocating memory until the end of content having an unknown duration has been fully recorded.

Ellis further fails to disclose, teach or suggest deallocating any of the allocated memory remaining after terminating the recording of the selected one of the identified titled audiovisual data. Ellis does not over-allocate memory because Ellis does not deal with recording programs of an unknown duration. Therefore, Ellis does not mention deallocating memory remaining after terminating the recording of the selected content.

Thus, Safadi and Ellis, alone or in combination, fail to disclose, teach or suggest the invention as defined in new independent claims 29-32.

Moeller fails to overcome the deficiencies of Ellis. Moeller is merely cited as disclosing storing a temporally sub-sampled version of the desired broadcast content to generate a fast-forward track and generating real-time encoded play tracks, fast forward tracks, rewind tracks, and entry point data (EPD) files associated with each track, wherein said fast-forward and rewind tracks forming said temporally adjusted content.

However, Moeller fails to disclose, teach or suggest determining from metadata whether a selected audiovisual data has an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box. Moeller does not disclose the recording of content having an unknown duration identified in metadata of the content.

Moeller further fails to disclose, teach or suggest that when the selected one of the identified titled audiovisual data is determined from the metadata to have an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box, receiving, at the set-top box, the selected one of the identified titled audiovisual data presented in the program guide as tracks divided into sequential extents representing sections of the selected one of the identified titled audiovisual data, allocating a portion of storage space for recording a received extent of the selected one of the identified titled audiovisual data, determining whether the received extent is a last extent of the selected one of the identified titled audiovisual data, when the received extent is determined not to be the last extent, determining whether a predetermined part of the allocated memory is consumed by recording the received extent of the selected one of the identified titled audiovisual data, when a predetermined part of the allocated memory is determined to be consumed, allocating a next portion of memory and when the received extent is determined to be the last extent, terminating the recording of the selected one of the identified titled audiovisual data after the last extent is recorded. Moeller does not mention any process for iteratively allocating memory when the duration of content is unknown. Moeller does not mention any process for iteratively allocating memory until the end of content having an unknown duration has been fully recorded.

Moeller further fails to disclose, teach or suggest deallocating any of the allocated memory remaining after terminating the recording of the selected one of the identified titled audiovisual data. Moeller does not over-allocate memory because Moeller does not deal with recording programs of an unknown duration. Therefore, Moeller does not mention deallocating memory remaining after terminating the recording of the selected content.

Thus, Safadi, Ellis and Moeller, alone or in combination, fail to disclose, teach or suggest the invention as defined in new independent claims 29-32.

Youden fails to overcome the deficiencies of Ellis and Moeller. Youden is merely cited as disclosing storing said fast-forward tracks in extents in front to back order and storing said rewind tracks in extents.

Youden fails to disclose, teach or suggest determining from metadata whether a selected audiovisual data has an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box. Youden does not disclose the recording of content having an unknown duration identified in metadata of the content.

Youden further fails to disclose, teach or suggest that when the selected one of the identified titled audiovisual data is determined from the metadata to have an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box, receiving, at the set-top box, the selected one of the identified titled audiovisual data presented in the program guide as tracks divided into sequential extents representing sections of the selected one of the identified titled audiovisual data, allocating a portion of storage space for recording a received extent of the selected one of the identified titled audiovisual data, determining whether the received extent is a last extent of the selected one of the identified titled audiovisual data, when the received extent is determined not to be the last extent, determining whether a predetermined part of the allocated memory is consumed by recording the received extent of the selected one of the identified titled audiovisual data, when a predetermined part of the allocated memory is determined to be consumed, allocating a next portion of memory and when the received extent is determined to be the last extent, terminating the recording of the selected one of the identified titled audiovisual data after the last extent is recorded. Youden does not mention any process for iteratively allocating memory when the duration of content is unknown. Youden does not mention any process for

iteratively allocating memory until the end of content having an unknown duration has been fully recorded.

Youden further fails to disclose, teach or suggest deallocating any of the allocated memory remaining after terminating the recording of the selected one of the identified titled audiovisual data. Youden does not over-allocate memory because Youden does not deal with recording programs of an unknown duration. Therefore, Youden does not mention deallocating memory remaining after terminating the recording of the selected content.

Thus, Safadi, Ellis, Moeller and Youden, alone or in combination, fail to disclose, teach or suggest the invention as defined in new independent claims 29-32.

Dependent claims 3-11, 13-21, 25, 27 are also patentable over the references, because they incorporate all of the limitations of the corresponding independent claims 30-31, respectively. Further dependent claims 3-11, 13-21, 25, and 27 recite additional novel elements and limitations. Applicants reserve the right to argue independently the patentability of these additional novel aspects. Therefore, Applicants respectfully submit that dependent claims 3-11, 13-21, 25, and 27 are patentable over the cited references.


On the basis of the above amendments and remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Attorney for Applicant, David W. Lynch, at 865-380-5976. If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 13-2725 for any additional fee required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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